

METHODS OF DIAGNOSIS AND TREATMENT

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THE COMPLIANCE TO THE PREVENTION OF THROMBOEMBOLIC COMPLICATIONS AFTER REPLACEMENT OF LARGE JOINTS

ABSTRACT

The article presents an analysis of the level of compliance to the prevention of thromboembolic complications in patients after arthroplasty of large joints carried out in the Republican hospital №2 of Yakutsk from January 2012 to December 2013. Studies have shown low levels of compliance in patients treated with parenteral and indirect anticoagulants.

Keywords: compliance, prevention of thromboembolic complications.

The reluctance of patients to follow treatment protocol is one of the most serious and compelling problems of modern medicine [1,2]. Compliance is a term that belongs to the everyday life of practitioners, both abroad and in our country. The word means the right, and moreover, conscious and consistent implementation of all advice received from the doctor by patients [3]. Lack of compliance (noncompliance) is an actual problem for all areas of clinical medicine [2]. According to modern studies, doctors in their practice address relatively rarely to the methods that can effectively influence the compliance of drug therapy, which may partly be explained by their lack of awareness on this issue. This review deals with the problem of compliance with anticoagulation therapy. The analysis of existing methods of compliance assessment, basic errors connected to the noncompliance with the regime of anticoagulation by patients is carried out.

Refusal of anticoagulant therapy or taking them in notoriously inadequate doses can lead to a number of serious adverse consequences, both for the patient and for the health system. Despite the awareness of the importance of regular intake of drugs, many patients do not take medications as prescribed.

The aim of this study is to assess the level of commitment to the prevention of thromboembolic complications after replacement of large joints, identifying the causes of noncompliance, as well as factors that reduce the compliance in this cohort of patients.

MATERIALS AND METHODS

During the period from January 2012 to December 2013 in the trauma and orthopedic department

of Republican hospital №2, Center of Urgent Medical Aid, 665 operations of degenerative diseases of the hip and knee joints were performed.

In order to prevent thromboembolic complications we used three treatment regimens:

1. Parenteral low molecular weight heparins (LMWH) as monotherapy (nadroparin calcium salt (fraxiparine)), enoxaparin sodium (clexane) and dalteparin sodium (fragmin).

2. Parenteral LMWH with the transition to indirect anticoagulants (warfarin).

3. Oral anticoagulants: Rivaroxaban (Xsarelto) and Dabigatranetexilate (Pradaksa).

Anticoagulant therapy is prescribed to all patients after surgical treatment. Treatment regimen is fully explained to patients by the attending physician before the operation, the patient then chooses which method is considered more convenient (the best) for him. The patient continues the selected thromboembolic complications prevention scheme during outpatient treatment.

Parenteral anticoagulants (enoxaparin sodium, nadroparin sodium, deltoparin sodium salt) were injected subcutaneously 1 time per day at the recommended doses (the first injection was pierced 12 hours before operation, the second - 12 hours after surgery) for 20-35 days. Oral anticoagulants (rivaroxaban, dabigatranetexilate) were given 6 hours after surgery for 25-35 days. The patients of the third group were injected with parenteral anticoagulants the day before surgery and for 10 days after surgery. From the sixth day of LMWH injection an indirect anticoagulant (warfarin) was added.

Upon reaching the figure of INR 2 LMWH was cancelled and indirect anticoagulants as preventive measures were continued up to 20-30 days, depending on the operation. All patients underwent coagulation control in the day of admission, one day after the operation, then on the fifth and tenth days after surgery and before release. Also indicators of CBC were monitored.

At release from hospital, all patients were given recommendations for further prevention of thromboembolic complications, the objectives of these medications and possible complications having been explained. Also the control of INR indicators were recommended for the patients having taken anticoagulants of indirect action.

RESULTS

According to the study the average age was $59,55 \pm 11,49$ years (from 17 years to 86 years). By gender: women 403 (60.6%), 262 men (39.4%). By referring arthroplasty: a knee joint 350 (52.63%), a hip joint 315 (47.37%). During the observation period patients received a monotherapy of parenteral LMWH (19 patients), which corresponds to 2.85%, 246 patients (37%) obtained parenteral LMWH with a transition to indirect anticoagulants and 400 patients (60.15%) – oral anticoagulants.

There are many methods, but none of them is considered ideal for the assessment of compliance. The most reliable of them is a count of used packaging. But it does not apply in practice, because many patients live in remote from the clinic locations. In connection with this, we carried out a telephone survey.

In this study, patients' compliance was assessed on the basis of the data

provided by them and the similar kind of compliance, obviously, can be called "declared compliance." The survey was conducted by questionnaire observation program HA2011-01RU, Soprano.

The survey of 469 patients was carried out as a result. 258 patients (55.01%) implemented fully the medical recommendations, from which the patients having taken anticoagulants according to Scheme 1 were 10 people, 28 people followed Scheme 2, 220 followed Scheme 3. 22 (4.69%) patients breached a drug receiving as a single pass, 12 (2.55%) patients replaced a product to other anticoagulants. However, these violations, in our opinion, could not significantly influence the development of thromboembolic complications, so this group of patients was assigned to the category of "conditional compliance." 58 (12.36%) patients completely ignored the medical advice that manifested in refusal to accept not only the anticoagulant, but other drugs. 13 (2.77%) patients randomly replaced it with a drug with different mechanism of action (antiplatelet agents), as well as taking medication not in the recommended doses. 72 (15.35%) patients did not undergo or

underwent coagulation control only once. Exceeding of a recommended dose is not ascertained. Also social factors have made their contribution to the structure of noncompliance. So 25 surveyed did not take recommended oral anticoagulants due to the absence of the drug in pharmacies, and 7 patients for the same reasons were forced, instead of an oral anticoagulant, to take its cheaper analogue because of the high cost of the drug.

According to the study, compliant are those patients who were assigned a parenteral and oral LMWH anticoagulant as monotherapy. Noncompliant are those patients who were recommended to take indirect anticoagulants. To these patients the recommendations to control coagulation were given, but this procedure was performed with 21 patients (once), the remaining patients either did not attend the clinic (13 patients) or in MPIs this procedure is not performed or they were not sent to specialists to whom they had addressed (8 patients).

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THE EFFECTIVENESS OF SELF-LOCKING SUTURES IN LAPAROSCOPIC MYOMECTOMY

ABSTRACT

The authors present a comparative analysis of the efficiency of laparoscopic myomectomy (LM) with bed unit closure with individual sutures and a monofilament self-locking barbed suture.

It was found that the use of knotless suture at LM helps to reduce the duration of closure of the myometrium defect, intraoperative blood loss, general surgical risks and the complexity of the intervention, the formation of a wealthy uterine scar due to full recovery of its anatomy. Statistically significant differences in the duration of operations, hospitalization periods, hemoglobin levels and postoperative complications were not observed.

Keywords: laparoscopic myomectomy, barbed suture V- lock, duration of suturing the myometrium defect.

The priority of organ-saving technology in uterine fibroids treatment (UF) is connected with the rejuvenation of women who are interested in their reproductive function in the presence of this disease. The need to improve aspects of choosing various technologies of reconstructive plastic surgeries is determined by symptoms, size and location of the tumour and the

number of fibroids [2,7].

Despite obvious advantages of laparoscopic myomectomy (LSM), widespread use of this method has contributed not only to the fibroids removal, but also triggered a debate about the viability of scars on the uterus. The cases of uterine rupture at the scar during parturition favoured the study of risks related to the adequacy

of the technical restoration of uterine walls integrity during laparoscopy, as well as suture healing conditions.

Optimum regeneration of dissected tissues is determined by the conditions of blood supply, that means by the way of uterine wall defect restoration and the type of suture material. Taking into account the necessity to achieve complementary hemostasis, especially